## AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS

## 1.-33. (cancelled)

- 34. (currently amended) A catalyst comprising nickel, silica, alumina and magnesium, wherein the nickel to silicon atomic ratio is [[2]] <u>6.5</u> to 30, the nickel to aluminum atomic ratio is 9 to 40, and the nickel to magnesium atomic ratio is 5-75, and the nickel surface area is at least 75 m²/g of nickel, and wherein the catalyst is coated with a protective layer, effective in preventing oxidation of the catalyst.
- 35. (previously presented) The catalyst according to claim 34, having an average particle size of about 3 to about 8 μm.
- 36. (currently amended) The catalyst according to claim 34, wherein the nickel to silicon atomic ratio is at least 6.5, preferably 6.5 to about 22 , more preferably 6.5 to about 15.
- 37. (currently amended) The catalyst according to claim 34, wherein the nickel to aluminum atomic ratio is about 10-35 , preferably about 15 to about 22.
- 38. (currently amended) The catalyst according to claim 34, wherein the nickel to magnesium atomic ratio is about 5-50 , preferably about 6 to about 20.

39. (previously presented) A method for preparing the catalyst according to claim 34, wherein

a nickel source, a silica source, an alumina source and a magnesium source are mixed in a liquid and co-precipitated therefrom to form a catalyst precursor,

the catalyst precursor is isolated from the solution, and
the catalyst precursor is activated to form the catalyst, the activation
preferably comprising a reduction of at least part of the nickel content of the catalyst
precursor, and optionally calcining the catalyst precursor before being reduced.

## 40.-42. (cancelled)

- 43. (new) The catalyst according to claim 34, wherein the nickel to silicon atomic ratio is 6.5 to about 15.
- 44. (new) The catalyst according to claim 34, wherein the nickel to aluminum atomic ratio is about 15 to about 22.
- 45. (new) The catalyst according to claim 34, wherein the nickel to magnesium atomic ratio is about 6 to about 20.
- 46. (currently amended) A catalyst comprising nickel, silica, alumina and magnesium, wherein the nickel to silicon atomic ratio is 6.5 to 30, the nickel to aluminum atomic ratio is 9 to 40, and the nickel to magnesium atomic ratio is 5-75, and the nickel surface area is at least 75 m $^2$ /g of nickel, and wherein the catalyst is coated with a protective layer, effective in preventing oxidation of the catalyst, said catalyst having an average particle size of about 1 to about 20  $\mu$ m.

- 47. (new) The catalyst according to claim 46, having an average particle size of about 4 to about 7  $\mu m$ .
- 48. (new) The catalyst according to claim 46, wherein the nickel to silicon atomic ratio is 6.5 to about 22.
- 49. (new) The catalyst according to claim 46, wherein the nickel to aluminum atomic ratio is about 10-35.
- 50. (new) The catalyst according to claim 46, wherein the nickel to magnesium atomic ratio is about 5-50.
- 51. (new) The catalyst according to claim 46, wherein the nickel to silicon atomic ratio is 6.5 to about 15.
- 52. (new) The catalyst according to claim 46, wherein the nickel to aluminum atomic ratio is about 15 to about 22.
- 53. (new) The catalyst according to claim 46, wherein the nickel to magnesium atomic ratio is about 6 to about 20.

54. (new) A method for preparing the catalyst according to claim 46, wherein a nickel source, a silica source, an alumina source and a magnesium source are mixed in a liquid and co-precipitated therefrom to form a catalyst precursor,

the catalyst precursor is isolated from the solution, and
the catalyst precursor is activated to form the catalyst, the activation
preferably comprising a reduction of at least part of the nickel content of the catalyst
precursor, and optionally calcining the catalyst precursor before being reduced.